

Notice of Allowability

Application No.

10/729,911

Examiner

Kathleen A. McNelis

Applicant(s)

BABJAK ET AL.

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE Filed 12/28/2005.
2. ☒ The allowed claim(s) is/are 7-12.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Claims Status

Claims 7-12 remain for examination wherein claim 7 is amended.

Acknowledgement of RCE

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.115, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 28, 2005 has been entered.

Allowable Subject Matter

Claims 7-12 are allowed.

Status of Previous Rejections

The declaration under 37 CFR 1.132 filed 30 November 2005 is sufficient to overcome the previous rejection of claims 7-12 based upon the claim rejections under 35 USC § 103.

The claim rejection under 35 USC § 112 is withdrawn.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Warren Cheek on 8 February 2006.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided

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by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Warren Cheek on 8 February 2006.

- **Revise claim 7., line 3:**

Reinstate the word "above" – i.e. claim should now read: "...within the range of above 2.5 to 6;"

Reasons for Allowance

The following is an examiner's statement of the reasons for allowance:

1. JP 2002-241856 discloses a method for precipitating Mn from a solution containing cobalt with cobalt hydroxide, ammonium persulfate or sodium persulfate wherein the pH is held to less than or equal to 3 and the ORP is regulated in a range of from 1,000 to 1,200 mV, but does not disclose or suggest a method for precipitating and removing Mn from a cobalt sulfate solution comprising the step adding sodium hypochlorite as an oxidative agent.
2. Brix et al. (U.S. Pat. No. 2,822,243) discloses a method for producing manganese dioxide by contacting manganese ore with sulfuric acid, separating iron and aluminum sulfates then removing manganese by adding sodium hydroxide and sodium hypochlorite. Brix et al. does not disclose or suggest a method for precipitating and removing Mn from a

cobalt sulfate solution wherein the pH is adjusted to the range of above 2.5 to 6 or that the ORP is regulated from between 1,100 to 1,300 mV.

3. In the 37 CFR 1.132 declaration submitted by applicant, testing was preformed on a solution of cobalt sulfate containing Mn dissolved in sulfuric acid. Applicant conducted 3 experiments, the first (No. 1) representing the claimed invention and the second two (Nos. 2 and 3) representing the closest prior art (JP 2002-241856 in view of Brix et al.). Results from the experiment representing the claimed invention (No. 1) met all the limitations of claim 7 while nether of the two experiments representing the prior art (Nos. 2 and 3) produced results meeting all of the limitations of claim 7. In the experiments, the solution of cobalt sulfate was adjusted in experiment No. 1 as required by claim 7, while two experiments representing the closest prior art (Nos. 2 and 3) were treated by adding sodium hydroxide and sodium hypochlorite (per Brix et al.) to final pH values of 4.1 and 5.6 respectively, representing the claimed range of between 2.5 and 6. In these second two experiments, Mn precipitation was either incomplete or did not occur and the resulting ORP was below the claimed range of between 1,100 to 1,300 mV. This was compared to applicant's methodology of adding only sodium hypochlorite to the solution, which resulted in substantially higher removal of Mn and ORP of 1,200 mV which is within the claimed range.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant's arguments, see Remarks pages 4 and 5 and Declaration under 37 C.F.R. 1.132, filed 30 November 2005, with respect to claims 7-12 have been fully considered and are persuasive. The rejection of claims 7-12 has been withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen A. McNelis whose telephone number is 571-272-3554. The examiner can normally be reached on M-F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ROY KING 
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700